OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF RECLAMATION

ATTACHMENT 20
(SEDIMENTATION POND/IMPOUNDMENT DATA SHEET)

Applicant's Name American Energy Corporation Pond # 15

Type of impoundment Excavated Permanent _____ Temporary X

1. POND DRAINAGE AREA DATA:

a) Drainage area 6.9 acres
b) Disturbed area 4.6 acres
c) Ave. land slope 20 %
d) Hydrologic soil group C
e) Hydraulic length 943 ft.
f) Cover/condition of the undisturbed area Pasture/Fair

2. DESIGN STORM CRITERIA:

a) Method:

1) Design method (s) including computer programs: SEDCAD 4.0
2) SCS curve number various (see run sheets)

b) Rainfall Amount/Peak Flow

	Rainfall, in.	Peak flow, cfs.
1) 10 year, 24 hour =	3.7	15.0
2) 25 year, 24 hour =	4.2	17.8
3) 50 year, 6 hour = (if permanent)		
4) 100 year, 6 hour = (if 20/20 size)		

3. POND SIZE:

a) Dimensions: **N/A Excavated Pond**

1) Dam height _____ ft.
2) Dam width _____ ft.(MIN)
3) Dam length _____ft.
4) Dam downstream slope _____% (MAX)
5) Dam upstream slope _____ % (MAX)
6) Core length _____ft. _____ft. ____ft.

b) Sediment storage volume 1.62 ac.ft. is provided below the 1147.8 foot elevation.

c) Stage/Area Data:

	Elevation ft.	Surface Area ac.	Volume ac. ft.
1) Bottom of pond:	1138.0	0.03	0
2) Streambed at upstream toe:	N/A	N/A	N/A
3) Principal spillway inlet:	1147.8	0.29	1.62
4) Emergency Spillway Crest:	1149.6	0.33	2.20
5) Top of embankment:	1152.0	0.40	3.06

4. PRINCIPAL SPILLWAY:
   a) Pipe length 52 ft.
   b) Pipe diameter 12 in.
   c) Pipe slope 1.54 %
   d) Riser diameter n/a in.
   e) Riser height n/a ft.
   f) Type of pipe PVC
   g) Number of anti-seep collars _____; spacing along pipe _____ ft.
   h) Does the design include a trash rack? x Yes, _____ No.
   i) Does the design include an anti-vortex device? _____ Yes, x No.

5. EMERGENCY SPILLWAY/**EXIT CHANNEL**:

   a) Base width 12 ft.
   b) Design flow depth 0.7 ft. Depth in level section 0.2 ft.
   c) Exit slope 24.1 %
   d) Exit velocity 3.7 fps
   e) Channel lining Vegetative Grass Mix
   f) Side slopes 2:1
   g) Freeboard 2.2 ft.
   h) Entrance slope 50.0 %
   i) Length of level section 20 ft.

6. The minimum static factor of safety for this impoundment is 1.5

7. Provide as an addendum to this attachment a detailed plan view or 2 cross sections of the impoundment.

8. COMMENTS

9. Is this an MSHA structure? _____Yes, X No. If "yes," provide the MSHA ID. number if one has been assigned _____.

10. If this is to be retained as a permanent impoundment, submit an addendum to this attachment demonstrating compliance with rule 1501:13-9-04(H) (2) of the Administrative Code.

11. I hereby certify that this impoundment is designed to comply with the applicable requirements of rule 1501:13-9-04 of the Administrative Code using current, prudent engineering practices.

William J. Siplivy
Signature

28 Nov 2001
Date

P.E. SEAL